

NEW SPECIES OF NEW WORLD BACCHA

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Several new species of American flies of the Syrphid genus *Baccha* are here described. The types are in the author's collection.

Baccha zabulon n. sp.

Related to *vespuccia* Hull and *brunnipennis* Hull. The hind femora and tibiae are quite pale yellow, not brown; the femora are blackish annulate. Wings slightly paler in color, the V-shaped yellow spots of the fourth segment are more broadly joined to the minute, yellow, basal triangles. Length 9 mm.

Female.—*Head*: face and cheeks pale yellow, the front yellow, except for a medial brownish stripe running three-fourths of the length of the front. The preantennal callus is brownish above with a small black spot anteriorly. The first two segments of the antennae are yellow, the third is missing. The vertex is black with golden-brown pollen; the black pile lies in a single row. Pile of front black, of face yellow. Occiput black with yellowish grey pollen and golden, non-flattened pile, the pile of the upper third black. *Thorax*: mesonotum black, quite widely pale yellow along the sides including the humeri and post calli and the whole of the scutellum. The scutellum is barely darker in oblique view but appears clearly yellow from above. The middle of the mesonotum is obscurely vittate with yellowish or reddish brown pollen. There is no anterior collar and the pile is sparse and yellowish. The pile of the scutellum consists of a very few long fine black hairs. There appears to be no ventral fringe. The pleura are yellow with a diagonal brownish black band posteriorly, occupying the sternopleura, metapleura and hypopleura. Squamae and fringe dark sepia. Halteres light reddish brown. *Legs*: all coxae and trochanters yellow. The anterior and middle legs and the whole of the hind legs, except a distinct wide, brown, subapical, femoral annulus, are yellow in color. *Wings*: uniformly tinged with light brown, the pterostigma scarcely darker. The third vein is gently arched, the costa drawn backward, the preanal spuria distinct, the alulae narrow, not wider than the width of the basal section of the costal cell. *Abdomen*: spatulate but little narrowed basally. The first segment is yellow with the posterior margin brown except upon the sides. The second segment is one and two-thirds as long as wide; just before the middle there is a broad, gently arched yellow band bordered anteriorly and posteriorly with opaque reddish-sepia. The third segment is similar, a little shorter, a little wider posteriorly and the yellow band is now narrowly divided in the middle, wider in the middle and located in the middle of the segment. Thus, this segment has a pair of closely approximate, yellowish triangles which reach narrowly to the lateral margin and which are bordered by opaque sepia. The fourth segment has on either side a deep-cleft, inverted, V-shaped spot which is rather broadly connected to the minute, submedial, basal yellow triangles. The outer limb of the "V" is broadly rounded and at least twice as wide outwardly as basally, the medial limbs of either side slightly converge posteriorly, are broadly rounded medially and their tips diverge and do not reach the posterior margin. These yellow figures are narrowly margined anteriorly with opaque brown and the clefts and medial space is filled with opaque brown. Fifth segment with a pair of submedial vittae similar to those of the fourth segment and with a pair of shorter, diagonal, sublateral yellow vittae which narrowly connect with a submedial pair at the base. The submedial vittae reach the posterior margin. Sixth segment yellow with two slender brownish black vittae.

Holotype: female, Chanchamayo, Peru, August 20, 1948, J. Schunke.

Baccha halcyone n. sp.

Related to *verona* Curran. The U-shaped yellow spots of abdominal segments three and four are not so deeply cleft, the fifth segment is quadrivittate. Length 6.5 mm.

Male.—*Head*: face, cheeks and front entirely pale yellow, the latter with a very minute, scarcely noticeable pale brown spot on the pre-antennal callus instead of the usual distinct black spot. The pile of the front is blackish, of the face yellow. The antennae are orange, the arista blackish. The vertex is blackish, the occiput black, somewhat crumpled and greasy. *Thorax*: mesonotum black with brassy reflections, the pollen obscured by poor preservation; the sides of the mesonotum including the humeri, postcalli and the scutellum are pale yellow. There is no anterior collar of pile. The mesonotal hair is fine and dark in color. Similarly the scutellar pile is sparse, fine, long and black. Ventral scutellar fringe absent. The pleura are pale yellow, the lower sternopleura, the metapleura and hypopleura sepia-brown. Squamae brown, the halteres sepia with the stalk pale. *Legs*: anterior and middle legs entirely pale yellow. The posterior fringe of the middle femora yellow, the hind femora with dark brown, wide, subapical annulus and less distinctly brown at the base. Hind tibiae biannulate, being light brown apically and just before the middle. Hind tarsi entirely yellow. *Wings*: not quite hyaline, the pterostigma pale brown. Alula quite absent. The preanal spuria is almost completely absent. The third vein is gently arched, the costa drawn considerably backwards. *Abdomen*: petiolate, the first segment yellow, shining brown posteriorly except upon the sides. The second segment is subcylindrical, three to three and a half times as long as its middle width; it is sepia brown in color except that the sides upon the basal half are diffusely shining yellowish but the yellow color is scarcely visible from above. Just past the middle there are a pair of narrowly separated, sharp, distinct, bright yellow spots bordered anteriorly and posteriorly with opaque sepia. Third segment nearly twice as wide posteriorly as basally; within the middle there is a pair of narrowly separated, clear yellow triangles which are indented in the middle of their posterior margins. Thus these spots resemble inverted V-shaped marks in which the clefts have been largely filled by yellow. These spots are broadly banded by opaque sepia which anteriorly extends nearly to the base of the segment. The fourth segment has similar, larger, more elongate, more deeply cleft and a little more widely separated clear yellow spots which are narrowly extended to reach the base of the segment. The medial area, the cleft and a very narrow margin antero-laterally are opaque sepia. The fifth segment has four yellow, wedge-shaped vittae, all about equally separated from one another. The medial pair are slightly longer but do not reach the posterior margin. They are separated by opaque sepia-brown.

Holotype: male. Chanchamayo, Peru, August 16, 1948, 1100 meters, J. Schunke.

***Baccha zerene* n. sp.**

Related to *mexicana* Curran. There is a pair of dull grey vittate marks enclosed in the opaque black triangle of the third and fourth segment. Females with these opaque sub-triangular bands wholly black. Length 12.5–16 mm.

Male.—*Head*: face black, diffusely yellowish white along the sides. The cheeks are black, the front shining black with an opaque black triangle above. The preantennal callus is large yellowish brown laterally, black in the middle and black posteriorly. The pile of the face and front is abundant, long and black. The facial pollen is distinctly white to silvery, extending narrowly up along the sides of the front as far as the middle where it ends and re-appears near the upper third of the front only to disappear at the base of the opaque black triangle. The antennae are quite black; only the base of the third segment is narrowly reddish below. The arista is black, a little reddish at the extreme base. The vertex is black, shining behind, but more nearly opaque between the ocelli; the black pile appears to be in a single row. The occiput is black with nearly white pollen with a row of long, scarcely flattened, white hairs in the middle. The upper occipital pile and the hairs next to the eye margin in the middle of the occiput are black. *Thorax*: black with very faint, submedial, reddish sepia, pollinose vittae which do not extend beyond the suture. There is no distinct area of lighter pollen in front of the scutellum. The scutellum is nearly black, but actually is perhaps of a very dark sepia color. The mesonotal pile is abundant, short and black, the scutellar pile similar. The ventral fringe consists of eight or nine pairs of yellow hairs, some of them quite long. Mesonotum with a well developed, pale yellow anterior collar of pile. The squamae and fringe are dark sepia, the halteres reddish sepia. The pleura are shining black, the posterior margin of the mesopleura obscurely-reddish brown.

Pleural pile yellow with a fringe of black hairs along the upper posterior margin of the mesopleura. Pollen whitish. *Legs*: anterior and middle femora very dark reddish-sepia, the middle pair almost black posteriorly, their tibiae nearly black, the tarsi also nearly black. The hind femora and tibiae are entirely black with dense, short black pile throughout. The hind basitarsi are blackish on the basal two-thirds, the remainder of these tarsi nearly white with white pile. *Wings*: deeply tinged with sepia on the entire base to just beyond the anterior cross vein with the exception of the anal cell, which is considerably paler at least on the marginal half. The posterior half and base of the preanal cell is also somewhat paler. Alulae wide, dark brown basally, diffusely merging into the subhyaline border. The dark sepia area of the base of the wing is nowhere sharply marked and grades diffusely off into the pale grey, nearly hyaline portion of the remainder of the wing. The marginal cell and whole of the submarginal cell are distinctly brown, but not quite so dark as the basal part of the wing. The preanal spuria is distinct. The third longitudinal vein is slightly curved backward before the end of the subapical cross vein. *Abdomen*: quite petiolate. The first segment is shining black; the second segment is nearly six times as long as its least width, very little more narrow in the middle than apically and its base and apex of nearly the same width. This segment is light reddish-sepia with, beginning a short distance from the posterior margin, a large, extensive, opaque, nearly black triangle which is quite long and acute and which reaches to within a short distance of the base. The third segment is similarly colored basolaterally, the posterior margin shining blackish, the greater part of this segment occupied by a very large, opaque black triangle which encloses a pair of obscure reddish, vittate streaks. The fourth segment also has a very large but shorter and broader opaque black triangle which like that of the third reaches the base of the segment and encloses a pair of similar though lead-grey vittate spots. The basal corners of this segment are more narrowly light reddish-brown. The fifth segment is shining black with three, short oval, opaque black basal spots. The pile of the abdomen is everywhere black except posteriorly upon the first segment where it is whitish. First segment pile long.

Female.—Face and head similar to the male, the front black, the white linear pollen along the eye margins uninterrupted. The squamae are very pale yellow but the fringe reddish-sepia. The legs are similar to the male, the dorsal pile of the middle tarsi whitish, the anterior tarsal pile black dorsally. The abdomen has the second segment only about two and a half times as long as its least width; it is very little narrowed in the middle. The third segment is as long as its posterior width and the posterior width not quite twice as wide as the basal width. The fourth segment is a little wider than long, the fifth segment nearly twice as wide as its length. Sixth segment almost as wide basally as the length of the segment and considerably narrowed posteriorly with a medial ridge. The seventh segment is laterally flattened. The second and third segments each have a large, central, opaque black triangle. The fourth segment has a large, broad, gently arched, opaque black band reaching nearly to the base of the segment; it is somewhat arched and occupies nearly the whole of the segment. The fifth segment is indistinctly opaque in the middle; the crumpled condition makes it difficult to discover the pattern. The sixth segment is entirely shining black. Pile of abdomen black except for a few white hairs along the sides of the second segment in the middle and anteriorly and posteriorly along the sides of the first segment.

Holotype: male, Chanchamayo, Peru, August 3, 1948; allotype, a female, July 17, 1948, J. Schunke.